THE GREAT POX – SYPHILIS
PLAGUES OF THE NEW WORLD – SMALLPOX & MEASLES

I. SYPHILIS
   A. INTRODUCED INTO EUROPE AROUND 1500
      1. CALLED THE "GREAT POX"
      2. BECAME EPIDEMIC QUICKLY - A "SOCIAL DISEASE"
         "SINS OF THE FATHER..."
      3. PRIMARILY SEXUALLY TRANSMITTED
   B. THE AGENT - A SPIROCHETE, TREPONEMA PALLIDUM
      1. SHEATH & AXIAL FILAMENTS..SHEATH HAS FEW ANTIGENS
      2. ESCAPES IMMUNE SURVEILLANCE
         STIMULATES ANTIBODY PRODUCTION TO SELF
      3. SERIOUS STAGE 3 SYMPTOMS
   C. PATHOLOGY IS COMPLEX
      1. PRIMARY-SECONDARY-TERTIARY FORMS
      2. REAGIN-DIRECTED Ab
      3. LATE STAGES DUE TO IMMUNE RESPONSE

II. SHORT HISTORY OF SMALLPOX – VACCINATION
   A. PRESERVED PHARAOHS SHOW EVIDENCE OF SMALLPOX
      (RAMSES V, 1160 BC)
   B. DESCRIBED IN CHINA ABOUT 400AD, VARIOLATION BY
      THE 10TH CENTURY. POPULAR BY 14TH CENTURY AMONG
      THE WEALTHY – INHALED DRIED SCABS
   C. INTRODUCED INTO EUROPE BEFORE 700 AD
      1. ENDEMIC IN EUROPE BY 1100 AD
      2. VARIOLATION INTRODUCED BY MARY MONTAGUE IN
         1720
      3. VACCINATION & JENNER – 1796
   D. DEVASTATING TO NEW WORLD INHABITANTS
      1. TAINOS/COLUMBUS  AZTECS/CORTEZ
         INCAS/PIZZARO
      2. SIR JEFFREY AMHERST & NATIVE AMERICANS
   E. VACCINATION DRAMATICALLY REDUCES INCIDENCE
   F. LAST CASE IN USA IN 1947
   G. WHO AND THE ERADICATION PROGRAM –’68–’77

III. THE POXVIRUSES AND SMALLPOX
   A. COMPLEX VIRUSES – LARGEST OF VIRUSES
   B. REPLICATE LIKE MINI-NUCLEUS
   C. VARIOLA MAJOR AND MINOR
      MANY RELATED VIRUSES
      MANY HOSTS (RECENT OUTBREAK OF MONKEYPOX)
   D. CAUSES HIGH FEVER FOLLOWED BY:
      POX
      30% MORTALITY
      RECOVERY WITH BLINDNESS, SCARING
      MOST DREADED OF ALL DISEASES

IV. MEASLES – THE SECOND PLAGUE OF THE NEW WORLD
   A. PROBABLY IN EUROPE SINCE ROMAN TIMES
B. ENDEMIC IN EUROPE THRU THE MIDDLE AGES
C. INTRODUCED INTO AMERICAS BY EARLY ENGLISH AND SPANISH COLONISTS
  1. CAUSED SEVERE EPIDEMICS
  2. HIGH MORTALITY WITH FEVER, BRONCOPNEUMONIA & ENCEPHALITIS
E. IN AFRICA IT KILLS MORE CHILDREN THAN AIDS & TB

V. THE DISEASE AND MEASLES VIRUS
A. REVIEW OF DISEASE
B. DEATHS DUE TO DEHYDRATION, BRONCOPNEUMONIA & ENCEPHALITIS
C. LATE SEQUEL IS SSPE
D. THE VIRUS
  1. A PARAMYXOVIRUS (WITH MUMPS AND RSV)
  2. A MINUS-STRAND, RNA VIRUS
  3. INFECTS BY RESPIRATORY ROUTE